



us-09-331-631a-5\_copy\_76\_144.rag

Best local similarity 95.7%; pred. NO. 1; 2e-28; Mismatches 3; Indels 0; Gaps 0.

Novel anti-microbial protein from e.g. Macadamia integrifolia -  
for controlling microbial infestations of plants or mammals

Claim 1; Page 43-45; 96pp; English.

The sequence is that of an antimicrobial protein. It can be used to control microbial infestations in plants and mammalian

sequence 625 AA; animals.

100.0%; Score 381; DB 19; Length 625;

st local Similarity 100.0%; Mismatches 0; Indels 0; G

136 eermkegn 144

MULT 2

W62828 standard; Protein; b66 AA.

WOZUZO,  
27-OCT-1998 (first entry)

Macadamia integrifolia antimicrobial protein.

antimicrobial protein, *lindnerin*,  
*Macadamia integrifolia*.

**Key**      **Location/Qualifiers**  
+-----  
1..28

- -1 -  
protein /note= "signal peptide  
29..666 "mature protein"

WO9827805-A1.

02-JUL-1998.

F  
E  
X  
22-DEC-1997; 9/WO-AU00674.  
96AU-0004275.

(RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.

BOWER NI, Goulter KC, Green JL, Manners JM, Munro -

WPI; 1998-3/12/25/25.  
N-PSDB; V42310.

Novel anti-microbial protein useful for controlling microbial infestations of plants or

Claim 1; Page 34-36; 96pp; English.

The sequences ... can be used to control microbial infestations in plants and animals.

XX  
5Q Sequence 666 AA;

Query Match 95 38; Score 363; DB 19; Length 666;

W62831  
 ID W62831 standard; Protein; 525 AA.  
 XX  
 AC W62831;  
 XX DT 27-OCT-1998 (first entry)  
 DE Theobroma cacao antimicrobial protein.  
 KW antimicrobial protein; infestation; control.  
 XX OS Theobroma cacao.  
 XX PN WO9827805-A1.  
 XX PD 02-JUL-1998.  
 XX PP 22-DEC-1997; 97WO-AU00874.  
 XX PR 20-DEC-1996; 96AU-0004275.  
 PA (RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.  
 XX PI Bower NI, Goulter KC, Green JL, Manners JM, Marcus JP;  
 XX DR WPI; 1998-377279/32.  
 XX PT Novel anti-microbial protein from e.g. Macadamia integrifolia - useful for controlling microbial infestations of plants or mammals  
 PT  
 XX PS Claim 1; Page 47-49; 96pp; English.  
 CC The sequence is that of an antimicrobial protein which can be used to control microbial infestations in plants and mammalian animals.  
 CC  
 XX SQ Sequence 525 AA;

Query Match 45.4%; Score 173; DB 19; Length 525;  
 Best Local Similarity 32.6%; Pred. No. 6.7e-10; Matches 31; Conservative 17; Mismatches 15; Indels 32; Gaps 1;  
 Matches 31; Conservative 17; Mismatches 15; Indels 32; Gaps 1;

QY 3 QRDPPQQVEQOKRCQRRETPEPRHMQICQQRERRYEKEKRKQ----- 46  
 :|||:||||:||||:|||:|||:|||:|||:|||:|||:|||:|||:|||:|||:  
 Db 35 erdpqrqyeqcrceateareeqeqcqrceykeqqrqeeelqrqyqqcqrcqe 94  
 :|||:||||:|||:|||:|||:|||:|||:|||:|||:|||:|||:  
 QY 47 -----KRYEQQREREDEEYERMK 65  
 :|||:|||:|||:|||:|||:  
 Db 95 qqqqqreqqqcqarkcwedykegergehenyhnhk 129  
 :|||:|||:|||:|||:  
 RESULT 5  
 R20181 ID R20181 standard; Protein; 566 AA.  
 XX AC  
 XX DT 16-APR-1992 (first entry)  
 XX DE Sequence encoded by 67 kD T. cacao protein cDNA.  
 KW Cocoa; flavour; vicilin; seed storage protein.  
 OS Theobroma cacao.  
 XX PN WO9119801-A.  
 XX PD 26-DEC-1991.  
 XX PR 07-JUN-1991; 91WO-GB00914.  
 PR 11-JUN-1990; 90GB-0013016.

RESULT 6  
 W62832 ID W62832 standard; Protein; 590 AA.  
 XX AC W62832;  
 XX DT 27-OCT-1998 (first entry)  
 DE Gossypium hirsutum antimicrobial protein.  
 KW antimicrobial protein; infestation; control.  
 OS Gossypium hirsutum.  
 XX PN WO9827805-A1.  
 XX PD 02-JUL-1998.  
 XX PR 20-DEC-1997; 97WO-AU00874.  
 XX PR 20-DEC-1996; 96AU-0004275.  
 PA (RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.  
 XX PI Bower NI, Goulter KC, Green JL, Manners JM, Marcus JP;  
 XX DR WPI; 1998-377279/32.  
 XX PT Novel anti-microbial protein from e.g. Macadamia integrifolia - useful for controlling microbial infestations of plants or mammals  
 XX PS Claim 1; Page 49-51; 96pp; English.  
 CC The sequence is that of an antimicrobial protein which can

XX  
PS  
XX  
CC Sequences Y58480-Y58532 represent immunogenic polypeptides derived from  
CC human herpes virus type 8 (HHV8, a gammaherpesvirus). HHV8 plays an  
CC important role in the pathogenesis of AIDS-related Kaposi's sarcoma. The  
CC invention relates to a novel method of detecting the presence of human  
herpesvirus 8 in a biological sample using peptides representative of  
dominant antigenic regions of HHV8. The method comprises contacting one  
CC or more isolated, immunogenic HHV8 peptides with an antibody-containing  
CC biological sample, and detecting the formation of a complex between the  
peptide and the antibody. The presence of a peptide-antibody complex  
CC indicates the presence of human herpesvirus 8. The detection of HHV8  
CC infection can be used to diagnose AIDS-associated Kaposi's sarcoma. The  
CC HHV8-specific antibodies are useful therapeutically when for the passive  
immunisation of a human against HHV8 infection, thereby reducing HHV8  
CC related disease. The detection assays are highly specific, sensitive and  
CC accurate. Early detection and treatment of Kaposi's sarcoma could  
CC diminish the severity of symptoms related to AIDS and the sensitive  
techniques could reduce erroneous characterisations of skin disorders.  
CC Previous assays for HHV8 antibodies such as immunoassays of serum disorders,  
CC immunoblots and enzyme immunoassays lack the sensitivity and accuracy  
CC needed for reliable diagnosis of Kaposi's sarcoma. Further advantages  
CC of the assays are that reproducible results are obtained and the method  
CC is suitable for rapid throughput and screening of samples economically.

SQ Sequence 1162 AA:

Query	Match	26.8%	Score	102	DB	21	Length	1162
Best Local	Similarity	31.3%	Pred.	No.	0.017			
Matches	21;	Conservative	24;	Mismatches	22;	Indels	0;	Gaps
QY	2	RQDPDQOYEQOCOKRCORRTEPRHMOTCQCCPFRPFKVKQKQVPRPDRWVW	61					



XX  
 PR 14-APR-1998; 98US-0081784.  
 XX  
 PT  
 XX  
 PA  
 XX  
 PI (SUGE-) SUGEN INC.  
 XX  
 PI Plowman G., Martinez R., Whyte D;  
 XX  
 DR WPI; 1999-611301/52.  
 XX  
 PT Novel kinase-related polypeptides used for the diagnosis and treatment  
 XX  
 PT of kinase-related diseases and disorders -  
 XX  
 PS Disclosure; Page 339-343; 387pp; English.  
 XX  
 CC Y68769-95 and Y68797-99 represent human phosphorylation effectors (PHSP),  
 CC designated PHSP1-PHSP31. (The protein sequence for PHSP28 is not given  
 CC in the specification). The sequences were isolated from cDNA libraries  
 CC prepared from various human tissues. The PHSP proteins are useful for  
 CC the diagnosis, treatment and prevention of proliferative disorders,  
 CC immune disorders and neuronal disorders. The PHSP proteins form  
 CC pharmaceutical compositions which useful for treating or preventing  
 CC disorders associated with decreased PHSP expression/activity. PHSP  
 CC antagonists are useful for treating or preventing disorders associated  
 CC with increased PHSP expression/activity.  
 XX  
 SQ Sequence 1135 AA:  
 Query Match 25.6%; Score 97.5; DB 21; Length 1135;  
 Best Local Similarity 39.2%; Pred. No. 0.077; Indels 11; Gaps 4;  
 Matches 29; Conservative 17; Mismatches 17; Gaps 4;  
 AC Y55954 standard; Protein: 1233 AA.  
 XX  
 Y55954;  
 XX  
 DT 18-FEB-2000 (first entry)  
 XX  
 DE Mouse STE20-related protein kinase NIK.  
 XX  
 KW Antirheumatic; antiarthritic; antinflammatory; antiallergic; osteopathic;  
 KW antipsoriatic; antiarteriosclerotic; antiasthmatic; immunosuppressive;  
 KW neuroprotective; cardiant; cerebroprotective; cytostatic; antidiabetic;  
 KW vulnerability; STK20; protein kinase; STK2; STK3; STK4; STK5; STK6; STK7;  
 KW ZC1; ZC2; ZC3; ZC4; KHS2; SULU1; SULU3; GER2; PAK4; PAK5; antagonist;  
 KW antibody; gene therapy; rheumatoid arthritis; asthma; rhinitis; inflammatory bowel disease; Crohn's disease; osteoarthritis; psoriasis;  
 KW antibody; gene therapy; rheumatoid arthritis; asthma; rhinitis; autoimmunity; organ transplantation; multiple sclerosis;  
 KW myocardial infarction; cardiovascular disease; stroke; renal failure;  
 KW oxidative stress-related neurodegenerative disorder; Parkinson's disease;  
 KW amytrophic lateral sclerosis; Leigh syndrome; diabetes mellitus; fibrosis; mitosis;  
 KW ischemic disorder; inflammation; growth regulation; wound healing; T cell activation;  
 KW immunosuppressant.  
 OS Mus sp.  
 XX  
 PN WO9953036-A2.  
 XX  
 PD 21-OCT-1999.  
 XX  
 13-APR-1999; 99WO-US08150.

KW immunosuppressant.  
 XX OS Homo sapiens.  
 OS Homo sapiens.  
 XX PN WO9953036-A2.  
 XX PD 21-OCT-1999.  
 XX PF 13-APR-1999; 99WO-US08150.  
 XX PR 14-APR-1998; 98US-0081784.  
 XX PA (SUGE-) SUGEN INC.  
 XX PI Plowman G., Martinez R., Whyte D;  
 XX DR WPI; 1999-611301/52.  
 XX N-PSDB; Z40483.  
 PT Novel kinase-related polypeptides used for the diagnosis and treatment  
 PT of kinase-related diseases and disorders -  
 XX Claim 11; Page 269-274; 387pp; English.  
 PS XX  
 CC This sequence represents a novel *STK20*-related protein kinase. The  
 CC invention relates to nucleic acid molecule encoding a kinase polypeptide  
 CC selected from *STK2*, *STK3*, *STK4*, *STK5*, *STK6*, *STK7*, *ZCL*, *ZC1*, *ZC3*,  
 CC *ZC4*, *KIN2*, *SUL1*, *SUL3*, *GAK2*, *PAK4* and *PAK5*. The proteins are used to  
 CC identify agonists and antagonists, and to raise antibodies. The  
 CC polynucleotides are useful in gene therapy protocols. The polynucleotides,  
 CC polypeptides, antibodies, antagonists and agonists may be used to treat,  
 CC diseases such as immune-related disorders and diseases (e.g. rheumatoid  
 CC arthritis, arteriosclerosis, chronic inflammatory bowel disease (e.g.  
 CC *Crohn's* disease), asthma, osteoarthritis, psoriasis, atherosclerosis,  
 CC rhinitis, autoimmunity, and organ transplantation, chronic inflammatory  
 CC pelvic disease, multiple sclerosis, organ transplantation, myocardial  
 CC infarction, cardiovascular disease, stroke, renal failure, oxidative  
 CC stress-related neurodegenerative disorders (e.g. amyotrophic lateral  
 CC sclerosis, Parkinson's disease and Leigh syndrome), cancer,  
 CC cardionyopathies, ischemic disorders, inflammatory disorders, diabetes  
 CC mellitus, fibrotic and mesangial disorders. The proteins may also be  
 CC useful for cell growth regulation (e.g. in wound healing), T cell  
 CC activation, mitosis control, and as immunosuppressants.  
 XX activation, mitosis control, and as immunosuppressants.  
 SQ Sequence 1239 AA;

Query Match 25.6%; Score 97.5; DB 20; Length 1239;  
 Best Local Similarity 39.2%; Pred. No. 0.051; Mismatches 17; Indels 11; Gaps 4;  
 Matches 29; Conservative 17; MisMatches 17; Indels 11; Gaps 4;

Qy 2 RQDPQQYEQCK--RCQRREPRIMQICQQRERRYEKEKRK---QQKRYEQQR- 54  
 Db 395 rqkriegkqekrrrqrrereqqqrqereqr--rregeekkrleelerrkeeeerr 452  
 Qy 55 --EDEEKYERMK 66  
 Db 453 raeekkrvereq 466

RESULT 12  
 Y07067  
 ID Y07067 standard; Protein; 482 AA.  
 XX AC Y07067;  
 XX DT 02-JUL-1999 (first entry)  
 XX DE Renal cancer associated antigen precursor sequence.  
 XX KW Cancer associated antigen; diagnosis; research; treatment; human;  
 KW breast cancer; colon cancer; gastric cancer; renal cancer; lung cancer;  
 KW prostate cancer.

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Query Match 25.5%; Score 97; DB 20; length 482;  
 Best Local Similarity 29.7%; Pred. No. 0.022; Mismatches 19; Conservative 25; MisMatches 20; Indels 0; Gaps 0;  
 Matches 19; Conservative 25; MisMatches 20; Indels 0; Gaps 0;

Qy 3 ORDPQQYEQCKQRREPRIMQICQQRERRYEKEKRKQQKRYEQQRDEEKEYE 62  
 Db 65 ererqlheewlreqkqafefrkkekkeakkrqeerklikeqweeqrkereeq 124  
 Qy 63 RMKE 66  
 Db 125 krqe 128

RESULT 13  
 Y55932  
 ID Y55932 standard; Protein; 1297 AA.  
 XX AC Y55932;  
 XX DT 18-FEB-2000 (first entry)  
 XX DE Human ZC2 protein.  
 XX KW Antirheumatic; antiarthritic; antiinflammatory; antiallergic; osteopathic;  
 KW antipsoriatic; antiarteriosclerotic; antiasthmatic; immunosuppressive;



AC	Y55933;	QY	54	REDEEK'ERMK	66
XX		DT	:	:      :	
18-FEB-2000	(first entry)	XX	404	reerraqeaeqe	416
		DE			
Human ZC3 protein.					
XX					
KW	Antirheumatic; antiarthritic; antiinflammatory; antiallergic; osteopathic; antipsoriatic; antil arteriosclerotic; antiasthmatic; immunosuppressive; neuroprotective; cardiotropic; antiasthmatic; immunosuppressive; vulnerary; STE20; protein kinase; STK2; STK3; STK4; STK5; STK6; STK7; ZCL; ZC2; ZC3; ZC4; KHS2; SUL1; SUL3; GPK2; PAK4; PAK5; antagonist; antibody; gene therapy; rheumatoid arthritis; atherosclerosis; asthma; inflammatory bowel disease; Crohn's disease; osteoarthritis; psoriasis; rhinitis; autoimmunity; organ transplantation; multiple sclerosis; myocardial infarction; cardiovascular disease; stroke; renal failure; oxidative stress-related neurodegenerative disorder; parkinson's disease; amyotrophic lateral sclerosis; Leigh syndrome; cancer; cardiomyopathy; ischemic disorder; inflammation; diabetes mellitus; fibrosis; miosis; mesangial disorder; growth regulation; wound healing; T cell activation; KW				
KW	immunosuppressant.				
XX					
OS	Homo sapiens.				
XX					
PN	WO953036-A2.				
XX					
PD	21-OCT-1999.				
XX					
PF	13-APR-1999;	99WO-US08150.			
XX					
PR	14-APR-1998;	98US-0081784.			
XX					
PA	(SUGE-) SUGEN INC.				
XX					
PI	Piowman G., Martinez R., Whyte D;				
XX					
DR	N-PSDB; 240485.				
XX					
PT	Novel kinase-related polypeptides used for the diagnosis and treatment of kinase-related diseases and disorders				
XX					
PS	Claim 11, page 278-283; 387pp; English.				
XX					
CC	This sequence represents a novel STE20-related protein kinase. The invention relates to nucleic acid molecule encoding a kinase polypeptide selected from STK2, STK3, STK4, STK5, STK6, STK7, ZCL, ZC3, ZC4, KHS2, SUL1, SUL3, GPK2, and PAK4. The proteins are used to identify agonists and antagonists, and to raise antibodies. The polynucleotides are useful in gene therapy protocols. The polynucleotides, polypeptides, antibodies, antagonists and agonists may be used to treat diseases such as immune-related disorders and diseases (e.g. rheumatoid arthritis, arteriosclerosis, chronic inflammatory bowel disease (e.g. Crohn's disease), asthma, osteoarthritis, psoriasis, atherosclerosis, rhinitis, autoimmunity, and organ transplantation, chronic inflammatory pelvic disease, multiple sclerosis, organ transplantation, myocardial infarction, cardiovascular disease, stroke, renal failure, oxidative stress related neurodegenerative disorders (e.g. amyotrophic lateral sclerosis, parkinson's disease and Leigh syndrome), cancer, cardiomyopathies ischemic disorders, inflammatory disorders, diabetes mellitus, fibrotic and mesangial disorders. The proteins may also be useful for cell growth regulation (e.g. in wound healing), T cell activation, mitosis control, and as immunosuppressants.				
CC	Sequence 1326 AA;				
CC					
CC	Query Match 25.1%; Score 95.5; DB 20; Length 1326;				
CC	Best Local Similarity 35.6%; Pred. No. 087; Mismatches 26; Conservative 18; Mismatches 20; Indels 9; Gaps 4;				
OY	2 RQDRDQOQE---QQKRCQRCRTEPRHMQICQQRCCRVEK-EKKQQRVEEQ--- 53				
Db	345 qqrdrpeahkhllhqrqrrrieqqkerrvee-qqrreerqrk1qkeqqrlednqalr 403				

